

PCTWORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶ : C07K 14/00	A2	(11) International Publication Number: WO 99/12960 (43) International Publication Date: 18 March 1999 (18.03.99)
(21) International Application Number: PCT/IB98/01424 (22) International Filing Date: 4 September 1998 (04.09.98) (30) Priority Data: 1041/97 10 September 1997 (10.09.97) DK 60/059,036 16 September 1997 (16.09.97) US (71) Applicant (for all designated States except US): SYMBICOM AB [SE/SE]; Tvistevägen 48, S-907 36 Umeå (SE). (72) Inventor; and (75) Inventor/Applicant (for US only): BERGSTRÖM, Sven [SE/SE]; Marmorvägen 95, S-907 42 Umeå (SE). (74) Agent: PLOUGMANN, VINGTOFT & PARTNERS A/S; Sankt Annæ Plads 11, P.O. Box 3007, DK-1021 Copenhagen K (DK).		(81) Designated States: AL, AM, AT, AT (Utility model), AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, CZ (Utility model), DE, DE (Utility model), DK, DK (Utility model), EE, EE (Utility model), ES, FI, FI (Utility model), GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (Utility model), SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>Without international search report and to be republished upon receipt of that report.</i>
(54) Title: P13 ANTIGENS FROM <i>BORRELIA</i>		
(57) Abstract <p>The invention relates to an isolated nucleic acid fragment which encodes a polypeptide fragment which exhibits a substantial immunological reactivity with a rabbit polyclonal antibody raised against a polypeptide having an apparent molecular weight of 13 kDa as determined by SDS-PAGE followed by visualization, said polypeptide being derived from <i>Borrelia burgdorferi</i> B313 and being encoded by the nucleotide sequence of SEQ ID NO:18, said rabbit polyclonal antibody exhibiting substantially no immunological reactivity with proteins from at least 95 % of spirochaetes randomly selected from the group consisting of <i>Borrelia hermsii</i>, <i>Borrelia crocidurae</i>, <i>Borrelia anserina</i>, and <i>Borrelia hispanica</i>, and/or hybridizes readily under highly stringent hybridization conditions with a DNA fragment having a nucleotide sequence selected from the group consisting of SEQ ID NO:18, SEQ ID NO:20, and SEQ ID NO:22, or with a DNA fragment complementary thereto, but exhibits no substantial hybridization when the hybridization conditions are highly stringent with genomic DNA from at least 95 % of spirochaetes randomly selected from the group consisting of <i>Borrelia hermsii</i>, <i>Borrelia crocidurae</i>, <i>Borrelia anserina</i>, and <i>Borrelia hispanica</i>. Furthermore, the invention relates to polypeptide fragments, vectors, transformed cells, and cell lines, a method of preparing a polypeptide fragment and, vaccines as well as diagnostic compositions and kits.</p>		